tic agent. The desired oxygen and anesthetic concentration would be entered into the machine, and infrared measurements in a feedback control loop with liquid injection would maintain the desired concentrations with virtually no waste. Current vaporizers and flow meters would be outdated—the automobile equivalent of points, condensers, and carburetors. All this would allow one to deliver the maximum possible number of MAC hours per bottle of inhalational agent. Discussions such as this make this book valuable to all practitioners.

Stephen C. Grice, M.D.
Department of Anesthesiology
Northside Hospital
Atlanta, Georgia 30358

Regional Anesthesia in Infants, Children, and Adolescents. Edited by Bernard Dalens. Williams & Wilkins Waverly Europe, 1995. Pages: 550. Price: $105.00.

Whereas other anesthesia books contain large sections on the topic of pediatric regional anesthesia, *Regional Anesthesia in Infants, Children, and Adolescents* remains the only textbook currently on the market that is devoted entirely to the subject of pediatric regional anesthesia. The strongest feature of the book is that it is produced by a renowned group of authors who have a vast and broad experience in the use of regional anesthesia techniques in pediatric patients. They have taken the knowledge they have gained from their many protocoled outcomes studies and coupled this information with a thorough review of the world literature, not just the English language literature, to create a commendable piece of work.

The translation from French to English by Rita Khandawala is very professional, and leads one to believe that the book was originally written in English. However, the text is not without error, and some of the mistakes are substantial. Legends are reversed in tables, and several drawings, while anatomically correct, are incorrectly labeled. These errors lead this reviewer to suggest that this book may be more useful to the experienced regional anesthetist, who can recognize the errors, and may not be for neophytes just learning pediatric regional anesthesia techniques.

Two blocks are synonymous with the Dalens' name, the fascia iliaca technique for neuroblockade of the lumbar plexus and the parascalene approach to blockade of the brachial plexus. It is this reviewer's opinion that these blocks are major and important advances in pediatric regional anesthesia; however, in the original journal articles, the supporting artwork lacked detail, size, and color. These aspects made it very difficult to understand the landmarks and fascial planes inherent to the successful placement of these blocks. Unfortunately, once again, the plates in the textbook lack the size, labeling, and color needed to render them supportive and useful. Two full-color pages would have made a remarkable difference.

Perhaps the best single aspect of the book is the wonderful chapter on "Pharmacology" by Isabelle Murat. In just 30 pages, she helps one understand why children obtain dense blocks with dilute local anesthetic solutions such as 0.125% bupivacaine and why neonates are at increased risk of local anesthetic toxicity. This chapter and the authorship by Professor Dalens on the majority of the remaining clinically relevant chapters in the book make it a reasonable buy for $105.00.

L. M. Broadman, M.D.
Department of Anesthesiology
West Virginia University Medical Center
Morgantown, West Virginia 26506

Nitric Oxide and Radicals in the Pulmonary Vasculature. Edited by E. K. Weir, S. L. Archer, and J. T. Reeves. Armonk, New York, Futura Publishing, 1996. Pages: 509. Price: $85.00.

Nitric oxide (NO), a simple free radical molecule, was classified for many years as a noxious air and smoke pollutant, but since 1986, it has become an exponentially increasing focus of biomedical research. (Fig. 1). The seminal observation that NO was endothelium-derived relaxing factor, and that NO was involved in the regulation of blood pressure, was also important as a neurotransmitter, and functioned as a defensive molecule to kill invading microorganisms has stimulated an enormous variety of research projects. The discovery of the use of inhaled gaseous NO as a selective pulmonary vaso- and bronchodilator rapidly transported this molecule into the fields of anesthesiology and critical care medicine, where we currently use it as an experimental therapeutic agent to reverse pulmonary hypertension and improve ventilation-perfusion matching in the lung. Nitric oxide interacts with oxygen and oxygen-derived molecules and radicals in the lung, reducing toxic effects. Balancing its beneficial roles, NO can bind with oxygen-derived superoxide to form the toxic radical peroxynitrite.

Drs. Weir, Archer, and Reeves compiled the results of their own research studies and the contributions of 66 authors from 14 states, Canada, and five European countries within the 27 chapters of this hardcover book. This compendium compresses an enormous variety of information (*e.g.,* 1,700 references) between its covers. Unfortunately, it contains neither an introduction nor a preface by the editors. Each chapter appears to be written independently, some in the style of a review article, some original manuscripts with detailed methods. The 137 figures often have long legends, and many seem reprinted from the original reports. The 17-page index is quite inclusive and useful.

After an initial review of the chemistry and physiology of oxygen and oxygen-derived species, 15 chapters compose a section describing a variety of physiologic and biochemical interactions of various radicals and NO with mammalian cells (*i.e.,* lipid and protein oxidation, endothelial function, phosphodiesterase isoenzymes, oxidant defense mechanisms). The subsequent 10 chapters depict the close relation of NO metabolism to clinical pulmonary pathophysiology (*i.e.,* inducible NO synthase in sepsis, the interaction with cyclic guanosine monophosphate, the regulation of pulmonary vascular tone, the roles of exhaled and inhaled nitric oxide in the neonate, lung-, and heart transplant patients).

Who should buy and read this book? The resident, fellow or attending, who uses NO in clinical anesthesiology or intensive care medicine, or the researcher with an M.D. or Ph.D. background who is beginning a NO-related project? Each could profitably read at least one or two chapters and obtain a very good review of their subject. Thereafter, they would need to read the well-cited original references and textbooks to more completely understand the more complex molecular and biologic-related chapters, or obtain a broader overview

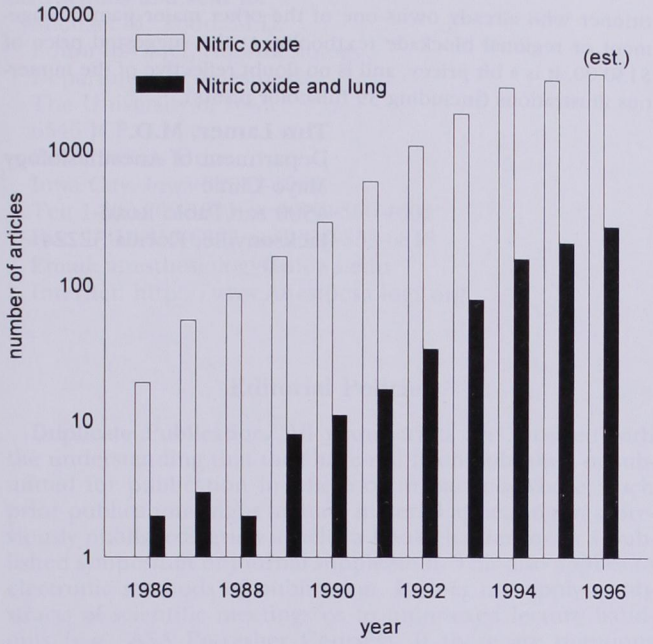

Fig. 1. Number of references retrieved from Medline-search (9/96), using the keywords "nitric oxide" or "nitric oxide and lung."

of the clinical experience reported in the literature. Almost every chapter can be read easily as an isolated report, but it is almost impossible to read this book from beginning to end, because it is not written in textbook format. Chapters jump between cellular biochemistry, molecular biology, physiology, and clinical experience. In our opinion, the book could have benefited from greater guidance of the reader through the various topics of the chapters. This book provides a broad overview of what is known about NO, radicals, and the lung in various research areas in 1996. As such, it serves as a compendium of reviews that would be a worthy addition to a reference library. Casual readers may find it difficult to navigate through the book; researchers may wish to rely on the original reviews or articles in the appropriate journals.

Wolfgang Steudel, M.D.
Clinical and Research Fellow
Warren M. Zapol, M.D.
Reginald Jenney Professor of Anaesthesia
Department of Anaesthesia and Critical Care
Massachusetts General Hospital
Harvard Medical School
Boston, Massachusetts 02114

Interventional Pain Management. By Steven Waldman and Alon Winnie. Philadelphia, W.B. Saunders. Pages: 594. Price: $130.00.

This is a multi-authored textbook edited by two well known interventional pain management specialists. The topics are based on the popular Interventional Pain Management Meetings sponsored by the Dannemiller Memorial Education Foundation, coordinated by one of the textbook editors. It consists of 54 chapters and contains more than 800 illustrations (photographs, tables, line drawings). The book is logically organized into six parts, consisting of 7 chapters on anatomy and physiology, 6 chapters on patient evaluation, 25 chapters on neural blockade, 5 chapters on neuroaugmentation, 7 chapters on spinal analgesia, and 4 chapters on neurosurgical techniques. Overall, the book is reasonably well referenced, well illustrated, and well indexed, making it a user-friendly text.

This book would best be described as a technical manual, instructing the reader with generous use of quality line drawings and radiographs accompanied by a reasonably detailed text. Although regional anesthesia and interventional pain management techniques are not ideally taught or learned from textbooks, this book provides a reasonable starting point. A majority of the 54 chapters were useful to excellent, whereas only 7 chapters would fit into the categories of poor or useless. For those interested in discussions on Radiofrequency Blockade and Celiac Plexus Blocks, these chapters were particularly thorough and well done. I would, however, caution the neophyte pain practitioner that the chapter on radiofrequency lesioning ascribed greater efficacy to the technique than actually exists in clinical practice. The excellent chapter on Functional Anatomy of the Spine is recommended reading to anyone just getting started in the area of spinal injection therapy, because it provides a nice overview of the role of injections for spinal axis pain. Other particularly strong chapters include Patient Selection Criteria for Spinal Cord Stimulation and two chapters on anatomy and pharmacology of the pain processing system, although these chapters do not have much to do with interventional pain therapy, *per se*. Unfortunately, a few important topics or techniques were either left out of the text (*e.g.*, intrathecal baclofen therapy, trigger point injections) or discussed only briefly (discography), while other topics of little significance received more extensive coverage (*e.g.*, ganglion impar block).

A review would not be complete without a few criticisms. There were a few annoying inconsistencies that could have been taken care of with closer editorial scrutiny. For example, several authors stated in their chapters that destructive nerve blocks have little or no place in contemporary treatment of noncancer pain, and the chapter on radiofrequency blockade insinuated significant efficacy for this neurolytic technique to treat a wide variety of noncancer pain problems. After reading the book, the reader is left somewhat confused as to the role of neurolytic nerve blocks in contemporary pain management. Similarly, the chapter on psychologic testing admonishes the reader that "placebo administration for the purpose of distinguishing between organic and psychogenic pain is not recommended." The next chapter follows with an extensive discussion on the value of placebo injection during the conduct of differential neural blockade. The five chapters on spinal cord stimulation and the seven chapters on spinal analgesia resulted in significant redundancy, and each of these sections could have been condensed into one or two chapters.

The authors targeted this book as a clinically oriented reference aimed at trainees and practitioners who are either beginning their practice or have only dabbled in pain management and are interested in becoming more involved in pain management. It is not a reference source for basic pain theory, pain mechanisms, and management of specific pain syndromes. I do not agree with the